

inps journal

Indiana Native Plant Society

Fall 2019

INPS children's book debuts

By Ruth Ann Ingraham

The winter 2018-19 *INPS Journal* announced our project to publish *Wake Up, Woods*, a book through which children can learn about some of our spring ephemerals, their pollinators and seed dispersers. The book is intended for students in primary grades.

The publication date for Wake Up, Woods was Oct. 1. Books will be available at the



annual INPS conference in Fort Wayne Nov. 9.

Books
will also be
available
at Richard
Louv's
presentation
at Butler
University
Nov. 1 and at
the Indiana
Historical
Society's

The Wake Up,
Woods team, from
left: Melissa Moran,
Mike Homoya,
Gillian Harris, Shane
Gibson, Ruth Ann
Ingraham, Carolyn
Wamsley; not
pictured: Pat Prather,
book designer

annual book fair Dec. 7. They are carried at book stores such as at Kid's Ink in Indianapolis and at nature centers and museums throughout the state.

Gillian Harris's botanical artistry, Shane Gibson's charming poems and Mike Homoya's intriguing facts bring to life the annual sequence of natural events in our forests. Book designer Pat Prather pulled these elements together in an appealing presentation.

To bring the book to fruition, a steering committee composed of Melissa Moran, Carolyn Wamsley and myself established what we hoped was an achievable goal to raise the needed funds. The quest began with significant seed money from The Indiana Academy of Science; The Nature Conservancy; Central Indiana Land Trust; NICHES Land Trust; Reconnecting with Our Waterways and

the Central Indiana Community Foundation; Sycamore Land Trust; and Mark H. Holeman, Inc., plus over 100 individuals. We are grateful to all who donated, with the promise of a firstedition copy.

The process of creating and melding images, poetry and information maintained its momentum, despite the fact that at first we did not know how the book would be published. Self-publishing was not a desirable option.

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Then in December, 2018, Tom Doherty, head of Indianapolis-based Cardinal Publishing Group, offered to publish *Wake Up, Woods*. Now we have a robust marketing partner. Since most of the plants featured in the book are found in Ontario, Canada, Wake Up, Woods is being promoted there as well.

We are grateful to Richard Louv, author of *Last Child In the Woods*; the staff of the Chicago Academy of Sciences/Notebaert Nature Museum; and Suzanne Walker, Indiana Center for the Book, Indiana State Library, for their tributes which appear on the dust jacket and book cover.

Wake Up, Woods aims to connect children to nature and inspire them to search our forests for plants with such captivating names as bloodroot and green dragon, plants that "wake up" each spring after a long winter's rest.

Ruth Ann Ingraham is a founding member and the historian of INPS.

2018 Wake Up, Woods Donors

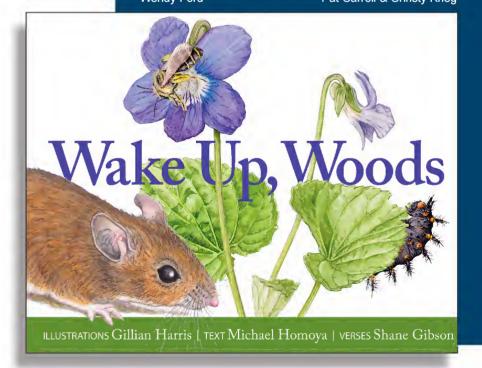
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Native Plant Quiz results!

By Alicia Douglass

Thanks to the 221 people who responded online to the Great Indiana Native Plant Quiz this spring! We hope to use this information to let plant producers know your favorite native plants, ones you are currently growing, what you would like to more readily find for sale, and the species you believe are undervalued in the home landscape setting.

It turns out that we native plant gardeners have over 250 favorite Indiana plant species in cultivation. Each question from the survey is listed below with the corresponding top 10 responses.

Which native plants are your favorites for a mostly sunny setting?

Butterfly milkweed (Asclepias tuberosa)
Purple coneflower (Echinacea purpurea)
Wild bergamot (Monarda fistulosa)
Joe Pye weed (Eutrochium spp.)
Swamp milkweed (Asclepias incarnata)
Blue false indigo (Baptisia australis)
Common milkweed (Asclepias syriaca)
Dense blazing star (Liatris spicata)
Prairie dropseed (Sporobolus heterolepis)
Yellow coneflower (Ratibida pinnata)

Which natives are your favorites for a mostly shady setting?

Wild ginger (Asarum canadense)
Red columbine (Aquilegia canadensis)
Virginia bluebells (Mertensia virginica)
Celandine poppy (Stylophorum diphyllum)
Wild geranium (Geranium maculatum)
Bloodroot (Sanguinaria canadensis)
Trillium (Trillium spp.)
Woodland phlox (Phlox divaricata)
Jack-in-the-pulpit (Arisaema triphyllum)
Solomon's seal (Polygonatum spp.)

Are there natives you want but have trouble finding for sale?

Wild ginger (Asarum canadense)
Spicebush (Lindera benzoin)
Fire pink (Silene virginica)
Jack-in-the-pulpit (Arisaema triphyllum)
Butterfly milkweed (Asclepias tuberosa)
Virginia bluebells (Mertensia virginica)
Trillium (Trillium spp.)

Wooly dutchman's pipe (*Aristolochia tomentosa*) Maidenhair fern (*Adiantum pedatum*) Serviceberry (*Amelanchier* spp.) Crossvine (*Bignonia capreolata*) Virgin's bower (*Clematis virginiana*)

Do you grow any uncommon native species you think should be more widely promoted for home landscaping?

Wild ginger (Asarum canadense)
Green dragon (Arisaema dracontium)
Sedges (Carex spp.)
Rattlesnake master (Eryngium yuccifolium)
Bloodroot (Sanguinaria canadensis)
Woodland stonecrop (Sedum ternatum)
Jack-in-the-pulpit (Arisaema triphyllum)
Swamp milkweed (Asclepias incarnata)
Cardinal flower (Lobelia cardinalis)
Blue lobelia (Lobelia siphilitica)

Do you have a favorite native shrub in a landscaped setting?

Spicebush (Lindera benzoin)
Buttonbush (Cephalanthus occidentalis)
Ninebark (Physocarpus opulifolius)
Serviceberry (Amelanchier spp.)
New Jersey tea (Ceanothus americanus)
Black chokeberry (Aronia melanocarpa)
Elderberry (Sambucus canadensis)
Wild hydrangea (Hydrangea arborescens)
Viburnum (Viburnum spp.)
Red osier dogwood (Cornus sericea)



Quiz-takers rated wild ginger a great native for shady settings.

Do you have a favorite native vine in a landscaped setting?

Wooly dutchman's pipe (Aristolochia tomentosa) Virgin's bower (Clematis virginiana)
Coral honeysuckle (Lonicera sempervirens)
Trumpet creeper (Campsis radicans)
Virginia creeper (Parthenocissus quinquefolia)
Crossvine (Bignonia capreolata)
Purple passionflower (Passiflora incamata)
American wisteria (Wisteria frutescens)
American bittersweet (Celastrus scandens)
Yellow passionflower (Passiflora lutea)

You may request more detailed survey results at grants@indiananativeplants.org.

Alicia Douglass is INPS biodiversity grants chair and a wetland scientist.

Black walnut (Juglans nigra)

By Judith Lieberman

When I was young, one day my dad came home very upset because 20 walnut trees on a property he owned had been poached. He had to explain to me that poaching meant the trees had been stolen. It took some doing to get my young head around why and how someone would steal big trees.

Now, of course, I know that black walnut (*Juglans nigra*) is a treasured wood and a mainstay in many of our Indiana forests. I also know walnut is still poached. There are reports of wal-

nuts being stolen by helicopter, since a single tree can be worth as much as \$40.000.

Walnut wood is Indiana's most valuable commercial tree in terms of weight. It is durable, will not shrink or warp, has a unique color and can be given a high polish. In the past, walnut was often used for furniture, gun stocks, even fence posts. In gun stocks, walnut's uniform density was thought to reduce recoil. In modern times the walnut's growth habit of tall, straight trunks make it ideal for veneers, those layers of wood cut paper-thin from a spinning trunk in a saw mill. This avoids waste and helps conserve a dwindling supply of larger trees.

Early settlers often looked for wooded areas with walnut trees as a sign of good fertile soil. Walnut grows best in limestone-rich alluvial soil, pref-

erably in moist bottomland. In undisturbed woods, walnut grows with red maple (*Acer rubrum*), sugar maple (*Acer saccharum*), beech (*Fagus grandifolia*), hickory (*Carya* spp.), oak (*Quercus* spp.), white ash (*Fraxinus americana*) and hackberry (*Celtis occidentalis*). Many folks have heard of "walnut groves." These occur because red or gray squirrels, about the only mammals with teeth sharp enough to regularly feed on walnuts, bury the nuts, and not, as many think, because of the tree's juglone, a slightly toxic substance that black walnuts exude to reduce competition since its saplings are not tolerant of shade.

The need for sunlight is also why walnuts are often pioneer species on the edge of prairies or

where forests have been decimated by fire. Other species such as hackberry and sugar maple also have the ability to inhibit the growth of surrounding plants (allelopathy) to some extent, but the walnut's juglone is more potent and has been observed since the time of the ancient Greeks and Romans (en.wikipena.org). Many garden crops are especially sensitive. Do not try planting a garden with tomatoes and kale within 50 or 60 feet of a walnut!

Despite walnut's reputation for deterring other plants, there are non-plant species that favor the walnut tree. It is a larval food of hickory and banded hairstreak butterflies (Satyrium caryaevorus and S. calanus) and the luna moth (Actias luna). Humans, too, are becoming fonder of our native black walnut. While most walnuts we eat are the milder English walnuts (Juglans regia) grown in California, a renewed interest in local edibles has led to increased sales of black walnuts. These native nuts have a bolder, more pungent flavor. Recipes can be found on the internet. Fall is the perfect time to enjoy Nut Crusted Mac and Cheese or Kale and Parmesan with Black Walnuts.

But be warned: extracting the nuts from their shells can be labor-intensive. Hammonds Products Co., located in Missouri, is the largest processor of black walnut nutmeats in the US. Black walnuts are for sale at several large grocery chains. See Debbi Snook's article (referenced below) about Hammonds and edible walnuts.

Nutritionists also praise walnuts. They are the only nuts high in alpha linolenic acid, an omega 3 fatty acid that can control appetite and insulin spikes and support heart health. Walnuts have the highest protein content of any tree nut.

Long before walnuts' nutrient value was understood, native American tribes used them for food, dye and medical remedies. Modern studies have shown the tree to have anti-fungal and antibiotic qualities, so it makes sense that Native Americans used walnut to cure athlete's foot and skin infections. The tree was so useful that it had a revered status in some tribes.

It is said that Miami Indians in central Indiana called the black walnut the "kokomo" and that a man known for his great size – over seven feet tall - and strength, was given the name "Kokomo" when he became chief. In turn, Kokomo, IN, was named for him. While this story and the actual

Native tree profile



Red and gray squirrels are among the few mammals with teeth sharp enough to open walnuts.

West Lafayette improves street trees

meaning of the word "kokomo" are disputed, the same traits reflect the strong, tall tree itself.

Walnut is one of the easiest trees to identify. It is one of the last to leaf out in spring, and in summer small oval leaflets, often as many as 25, comprise a single leaf, which can grow one to two feet long. As the fruit begins to set in late summer and fall, there is no mistaking the chartreuse orbs almost the size of tennis balls that contain the nuts. In winter the distinctive dark, deeply furrowed, diamond-patterned bark on these straight trees also makes walnuts a standout.

The fruiting body of the walnut is called a drupe. The nuts are covered with a green outer husk that is thick and hard to crack. Inside is a hard hull or shell, and within that is the nutmeat, actually two enmeshed cotyledons which serve as nutrients to feed the tiny seedling inside.

Sadly, walnuts are being threatened with a scourge called thousand cankers disease which is caused by a fungus (*Geosmithia morbida*) transmitted by the walnut twig beetle (*Pityophthorus juglandis*). The beetle is in nine western states, but since 2010 has been discovered in Tennessee, Virginia, Pennsylvania, Ohio and North Carolina. So far the disease has not harmed Indiana's black walnuts, but DNR is monitoring the situation. In the meantime, Indiana has banned all parts of walnut trees as well as hardwood firewood from states where the disease is active, including Ohio.

Because of the species' big taproot, walnuts do not transplant well, but seedlings are available from DNR and some nurseries. If you have an open space in your yard and don't mind gathering nuts, walnut is a beautiful shade tree.

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Judith Lieberman is a member of INPS Central Chapter.

By Karen Griggs

Bryce Patz has 9,000 trees in his care. An arborist with public horticulture expertise, he is West Lafayette's "Neighborhood Vitality and Greenspace Administrator."

In an interview conducted for this article, he explained that his work is broader in a social sense than a traditional forester's role. He gives developers a tree manual containing city code pertaining to tree preservation, lists of approved or undesirable street trees, and requirements for trees in parking lot islands. Contractors must avoid planting trees with messy fruit such as mulberries (*Morus* spp.) and with weak wood such as willow (*Salix* spp.) and box elder (*Acer negundo*).

"The demand for street trees is the same, but the cost has increased to \$450 to \$480 per tree." Patz said.

He suggests landscaping materials that meet conservation goals and enhance the beauty of subdivisions and commercial sites. Contractors learn about greenspace requirements and planting standards long before they plan commercial or residential developments.

Patz has partners in the Neighborhood Vitality program. He works with a team of Purdue University anthropologists to help grassroots organizations hold public input meetings where new residents learn about the street tree planting and pruning program and public services. After talking to residents, Patz says, the team "identifies neighborhoods, generates a plan and collects resources."

Patz also works closely with The West Lafayette Tree Friends (TWLTF), established in 1981. The volunteer group solicits donations for tree plantings and has evolved from a non-profit to a government unit. They "plant, prune and protect" street trees all over the city. Tree Friends have a fall information table at the farmers' market and publish photos on their website to warn residents about pests such as the Asian longhorn beetle and sudden oak death, a disease caused by a water mold pathogen (Phytophthora ramorum). Beginning each April, for about six weeks, six experienced Tree Friends volunteers wearing bright yellow vests conduct a study of pruning needs and prune damaged or diseased branches. SCCI



A USDA study published in 2013 estimated annual sequestration of carbon by urban trees in the U.S at 25.6 million metric tons per year.

Itrr.arizona.edu PDF,
 "Carbon Storage
 Sequestration Urban
 Forests"

Street trees – continued on page 7

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To promote the appreciation, preservation, scientific study, and use of plants native to Indiana.

> To teach people about their beauty. diversity, and importance to our environment.

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Share online: Send information for posting to webmaster@indiananativeplants.org.

Chapters busy in summer, fall

Central Chapter

Central Chapter's busy summer included a July 21 presentation on "Why Indiana Native Plants?" by INPS past president Tom Hohman at the Pike Branch Library, Indianapolis, and a July 28 panel, "Native Plant Buzz Session: Engaging HOAs [Home Owners Associations] in Native Landscaping," at Spirit Lake Condominiums Clubhouse in Indianapolis.

"Native Fruit and Nut Trees" were the Aug. 4 topic of Dr. Kris Heeter, a biologist at Indiana University and owner of a small orchard and classified forest in Solsberry, IN. The INPS event involved opportunities to taste some unusual fruits. Heeter and her husband are working with the Indiana Nut and Fruit Growers Association to develop the first fruit and nut tree repository in the state.

Two pop-up garden tours in Westfield and Noblesville on Aug. 17 showcased small yards in HOA communities, where native plants are incorporated into the landscape. Another pop-up tour Aug. 31 featured Sarah Gray's property at Eagle Creek Reservoir. On Aug. 18 Emily Wood, executive director of Indiana Wildlife Federation, presented a program on "A Wild Climate: How Climate is Changing Wildlife and Habitats" at the IWF office in Indianapolis. Tom Hohman presented his program "Why Native Plants for the Home Garden?" Aug. 20 at the new Pecar Park Nature Center, Avon.

Members looked for wildflowers, birds and pawpaw trees (*Asimina triloba*) during a Sept. 8 hike led by Ben R. Hess at the 40-acre Thornwood Preserve, Greenfield. On Sept. 11, members participated in a butterfly tagging event with the Indiana Wildlife Federation at the National Institute for Fitness and Sport Building, Indianapolis, where monarchs were tagged and released.

South Central

July 21 found South Central members hiking in Flatwoods Park in Monroe County, led by Cathy Meyer. On Aug. 11, Jill Vance headed up a hike near Lake Monroe.

Upcoming: On Oct. 26 Gillian Harris and Mark Sheehan will lead a tour of Lilly-Dickey Woods at the IU Research and Teaching Preserve in Brown County.

North Chapter

North Chapter's summer events included a hike through Grand Prairie in Highland on July 13. Adam Balzer led the group through this mesic prairie where restoration has significantly improved the site in just one year. Highlights included many wildflowers in bloom: Sullivant's milkweed (Asclepias sullivantii), swamp milkweed (A. incarnata), compass plant (Silphium laciniatum), prairie dock (S. terebinthinaceum), Culver's root (Veronicastrum virginicum), rattlesnake master (Eryngium yuccifolium), switchgrass (Panicum virgatum), Leiberg's panicum (Dichanthelium leibergii) and Michigan lily (Lilium michiganense).

Educational outreach events included a booth at the Michiana Master Gardeners' annual garden tour in Nappanee July 13. Two new volunteers staffed the booth and reported a good turnout and great interest in native plants. On July 26 North Chapter participated in a Green Day event at the Elkhart County 4-H Fair in Goshen, where INPS volunteers provided information on native and invasive plants and held activities for children. Members also staffed a table at the popular Envirofest Aug. 3 at Central Park in Elkhart. The event is sponsored by the city's Elkhart Environmental Center.

On Aug. 30 Samantha Kinsman and Eric Bird led members through one of the most impressive prairies in Indiana, Cressmoor Prairie in Hobart, a high-quality black soil prairie once common in northwest Indiana. This tract preserves the topographic and biotic diversity of the sand plains north of the Valparaiso Moraine.

Street trees - from page 5

Corp. volunteers also pruned new trees along State Rd. 231 west of downtown.

TWLTF recently planted over two dozen new hardwood tree varieties along Kalberer Rd. That test site will show the public some alternatives to popular, highly invasive ornamental pear (*Pyrus calleryana*) trees and many ash (*Fraxinus* spp.) that have died due to the emerald ash borer.

Karen Griggs is an INPS member and a technical writer in West Lafayette.





Nov. 9, Fort Wayne

INPS conference goes north

By Nancy Hill

The INPS annual conference will be Saturday, Nov. 9, at the Grand Wayne Convention Center in Fort Wayne. This event is one of Indiana's premiere nature events, drawing environmentalists, gardeners, nature photographers, bird lovers, landscapers, ecologists, plant lovers and students.

The day will start with a keynote address from Patrick McMillan, six-time Emmy Award-winning writer and host of PBS's "Expeditions with Patrick McMillan." McMillan recently won the prestigious Award of Excellence from National Garden Clubs, Inc. He travels the world and gives over 100 public presentations annually. He has authored or co-authored several books, including his newest, *Gardening with Wild American Eyes*, coming out in 2020.

McMillan received his PhD in biological sciences from Clemson University where he teaches environmental sustainability in the department of forestry and environmental conservation. He is director of the South Carolina Botanical Garden, the largest native garden in the southeast US. In his nine-year tenure, the garden has grown to include 13,500 plants, doubled its bird species and tripled its butterfly diversity.

The speaker will bring his knowledge of both flora and fauna to his talk, "The Holistic Landscape: Diversity Breeds Diversity." In the afternoon of the conference, he will present an original program, "Hummingbirds, Life in Fastforward." The program includes high-speed videography that has never before documented the intricate movements of hovering that makes these tiny creatures so fascinating.

Sharon Sorenson, author of more than 20 books, will speak on "Native Plants and Bird Survival: The Essential Connection." Want to attract birds? Sorenson says it's about much more than feeders. She and her husband have provided the necessary natural resources so that their property came to support 127 bird species and 56 butterfly species. Sorenson is the 2014 recipient of the prestigious Earl Brooks Award for the Advancement of Conservation of Natural Resources in Indiana and was recently a guest on a one-hour PBS special titled "Bird Migration." Her books include *Planting Native to Attract Birds to Your Yard* and *Birds in the Yard*

Month by Month. Her newest book, How Birds Behave: 365 Days of Discovery, will be released Feb. 1, 2020.

Tony Fleming will explain "Why Does This Plant Grow Here...But Not There?" He will discuss the major geologic features and processes responsible for plant distribution. Fleming is a geologist with graduate degrees in geology, geophysics and water resources management. He is the author of many geological studies and publications, management plans, ecological guides and inventories for a variety of natural areas in the eastern US. He is a long-time Indiana Master Naturalist instructor and hike leader.

Fleming will also conduct Friday morning and afternoon pre-conference field trips through Chain O' Lakes State Park and Glacial Esker Nature Preserve.

Alyssa Nyberg's subject will be "The Joy of Germinating: Growing Native Plants from Scratch." Nyberg has worked at The Nature Conservancy's Kankakee Sands since 1999, where she manages the native plant nursery, growing rare plants in the greenhouse, designing seed mixes for 8,000 acres of prairie plantings, harvesting and processing native plant seeds, and coordinating bird and butterfly surveys. She has a master's in environmental science from Indiana University. She will offer resources and practical information for growing natives from seed.

Kevin Tungesvick will speak on "Climate Change and Indiana Plant Communities." A longtime member of INPS, he is known for his extensive knowledge of Indiana's flora and fauna. He worked at a wholesale native plant nursery for 22 years, as supplier and technical advisor on numerous large-scale restorations. He performs floral inventories and has published many articles. Tungesvick also holds a BS degree in atmospheric science from Purdue University and worked as a meteorologist for the National Weather Service for three years. He will draw from both disciplines to discuss how changing temperatures and precipitation patterns are affecting plant communities.

Think you're a nature smarty-pants? Join Michael Homoya, a.k.a. "The Big Hawaiian," for "Naturally Indiana – It's (Still) Wilder Than





Tony Fleming (top) will lead pre-conference hikes and speak on the science of plant distribution. Kevin Tungesvick will speak on the effects of climate change on plant communities.

Amos K. Mehl, "poet and cameraman"

By Terri Gorney

In a 1919 newspaper article*, Albert Ringwalt wrote that A. K. Mehl was the "poet and cameraman" of the Allen County Audubon Society (later the Stockbridge Audubon Society). The article was accompanied by several of Mehl's photographs of the Dec. 22, 1918, Christmas Bird Count, conducted along the old feeder canal towpath west of the St. Joseph River in Fort Wayne.

Amos K. Mehl was born in Holmes County, OH, in 1861 and as a child moved with his family to rural LaGrange County, IN. He started his career as a teacher in Fort Wayne, spent several years as a mail carrier and later became an attorney, but his passion was nature.

Mehl loved photographing nature and writing about it. "Every lover of the out-of-doors is conscious of the feeling of companionship in the open," he wrote.** He captured the essence of "outdoor Indiana," whether it be in the early 20th century or in our own 21st century. His words paint vivid pictures of landscapes, wildflowers and birds.

Mehl wrote three books: *Nature Lovers' Poems* (1917), now in the public domain and available as a reprint; *Symphonies of the Solitudes* (1930), a collection of short prose, and *Wild Paradise* (1937), a book of short travels, both available at libraries and used book stores.

Conference – from left

You Think," a challenging game of trivia about all things naturally Indiana -- plants, animals, early landscape, natural communities, nature preserves, famous Hoosier naturalists, etc. Each table of attendees will team up to compete. Homoya is a past president of INPS and a retired DNR Division of Nature Preserves biologist.

Go to indiananativeplants.org for more conference information and to make your reservation. You can also address specific questions to info@indiananativeplants.org.

Nancy Hill is co-chair of the 2019 INPS annual conference. Her co-chair is Ronnie Greenberg.

When his first work was published, Amos earned a nice review in *Camera Craft* magazine***: "So the author gives us, in these poems, an interpretation of the various moods of nature, of the great outdoors that we all find so sympathetic and inspiring. The sixty-two poems are sure to please the genuine nature lover and as a gift the book makes a strong appeal."

One of my favorite passages is in *Wild Paradise*: "A journey through the woods is good for the soul. There in God's great cathedral of mighty trees and bright shafts of sunlight flooding the trails, one is made to feel how little his individual existence counts in the great plan of the universe. Through the opening in the canopy of leaves. I looked up into the clear blue sky."

In 1939 Mehl moved to California where his son's family lived. He died there in 1941.

I shared a couple of his poems with Shari Miller Wagner, Indiana Poet Laureate, 2016-2017. Shari told me a family story of an Amos who wanted to be a poet. I solved her mystery. It was Amos Mehl – family lore turned out to be true.

*Journal-Gazette, 12 Jan., 1919, p. 6B

**From the Introduction to Nature Lovers' Poems by Amos K. Mehl, 1917

*** Camera Craft, Vol. 25, p. 84, 1917

Terri Gorney is a member of INPS Northeast Chapter and vice-president of Friends of the Limberlost.

Naturalist profile



Amos Mehl published three books of poetry as well as photos of nature.

October Leaves

"... A vast expanse of red and gold, A wealth of riches to behold, A grandeur of funereal thrall That Autumn on the pyre lets fall.

... This picture rare each year is hung, 'Gainst rare, rich mantle Autumn-flung; It tells of life and death once more, Of death in life, of harvests o'er."

Excerpt from *Nature Lovers' Poems* by Amos K. Mehl

Japanese barberry

Florathon 2019:

"By halves"

By Laura Sertic

Japanese barberry (*Berberis thunbergii*) may be pretty, but this invasive shrub native to Japan is destructive to our native Indiana plants. It was introduced to the US as an ornamental plant in the late 1800s and has been used here for landscaping ever since. It is resistant to deer browse and takes over many different habitats, including forest and wetlands. Japanese barberry is able to alter soil pH and nitrate levels to benefit itself and overpower native plants. It can grow in situations from full sun to deep shade.

This spiny deciduous shrub usually grows two to three feet tall, but can be as tall as six feet. On the stems of its arching branches

Birds eat fruits of Japanese barberry and disperse their seeds widely.

Invasive

plant

profile

a single spine below each rosette of untoothed leaves. Japanese barberry is so often selected as an ornamental shrub because of its hardiness and its brilliant

there is

show of colors: green early spring leafing, yellow flowers, bright and impressive fall colors, and red berries in winter. The berries are eaten by birds which spread the seeds, creating invasive colonies in wild areas.

Japanese barberry is a growing concern in Indiana because of how easily it spreads. If allowed to persist, control becomes more expensive and difficult. However, because of its coloring and the fact that invasive plant species usually leaf out earlier than native plants in the spring, it is fairly easy to identify.

It is recommended to remove Japanese barberry mechanically because this is effective and minimally intrusive. A hoe, weed wrench or mattock can be used to uproot the entire plant

By Barbara Homoya

There's an old term, "by halves," meaning onehalf of something. That could be the theme of the 2019 Florathon. Whether number of teams, participants, counties, donors or amount of money raised, this year's results are about one-half of the 2018 inaugural Florathon.

This year there were eight teams with 33 participants who canvassed 16 total counties. Forty-nine donors gave a total of nearly \$2,400 to support the work of Letha's Youth Outdoors Fund. Eight new members were added to the INPS rolls. In 2018, 13 teams scoured 23 counties, raising over \$4,000 from nearly 100 donors and recruiting 19 new members.

Top awards in 2019 go to Bloomin' Stellarias for most species (88), DNR Nature Preserves Team for most donations collected (\$748) and Always Be Botanizing for most counties surveyed (10).

We would like your suggestions to increase participation in the 2020 Florathon. Please share your ideas with any Florathon committee member (Lee Casebere, Roger Hedge, Mike Homoya, Barb Homoya) or any council or board member. Watch for future Florathon information and team stories in upcoming journal issues, as well as a team sign-up table at the annual conference Nov. 9. The INPS Florathon traveling trophy, the "Audrey II," will make an appearance there, too.

Let's have a bumper crop of participation and donations for the 2020 Florathon!

Barbara Homoya has chaired Florathon both years.

and its roots. As long as there are no berries on the shrub, which could spread the seeds, cut Japanese barberry branches can be stacked to create shelter for animals.

References

Japanese barberry, Michigan Department of Natural Resources, 2012 https://mnfi.anr.msu.edu/invasive-species/JapaneseBarberryBCP.pdf
Japanese barberry, Michigan.gov, 2019.

www.michigan.gov/invas/0,5664,7-324-68002_71240_73850-379489-,00.html
Japanese barberry, The Nature Conservancy in Indiana, obsolete web page, accessed 2019.

Laura Sertic works for The Nature Conservancy in Indianapolis.

Letha's Fund gets kids out of school

By Angela Sturdevant

My nine-year-old daughter loves school, but she loves being out of school even more. What nine-year-old doesn't relish the chance to escape school for a day to go explore nature? Last year INPS helped almost 900 students get out of their classrooms and into the outdoors.

Letha's Youth Outdoors Fund provides grants to schools and other organizations to help cover costs of field trips to natural areas, including transportation and naturalist fees. For the 2018-19 school year, Letha's Fund awarded 13 grants to schools across the state, from South Bend to Evansville, totaling \$5,134.

Applications are accepted on a rolling basis year-round, and so are your donations. Information on donating to Letha's Fund or applying for a grant is at www.indiananativeplants.org/education/letha. Help spread the word about this opportunity by telling a teacher near you about Letha's Fund.

Angela Sturdevant is Letha's Fund team leader and a member of INPS South Central Chapter.

Applicant	County	Trip location Appr	oved
Bloomington High School North	Monroe	6 stream sites in northern Monroe County	\$630
Chandler Elementary	Elkhart	Amigo Centre, Sturgis, MI	\$600
Eastern Elementary PTO	Howard	Camp Tecumseh, Brookston	\$700
Evansville Vanderburgh Schools (Tekoppel Elementary)	Vanderburgh	Howell Wetlands (Wesselman's Nature Soc.)	\$170
Goshen High School	Elkhart	Merry Lea Environmental Learning Center	\$161
Greenwood Community Schools (Westwood Elementary)	Johnson	Camp Tecumseh, Brookston	\$500
Guion Creek Elementary	Marion	Eagle Creek Park, Indianapolis	\$282
Indpls Math & Science Acad. North	Marion	Marian University Ecolab, Indianapolis	\$441
IPS 84 Center for Inquiry	Marion	Mary Gray Bird Sanctuary, Connersville	\$400
New Augusta Public Academy South	Marion	Holliday Park & Nature Center, Indianapolis	\$210
South Bend Community Schools (Clay High School)	St. Joseph	Great Smoky Mountains Inst. at Tremont	\$700
SW Indiana Jr. Master Gardeners	Vanderburgh	Wesselman Woods, Evansville	\$100
William McKinley IPS School 39	Marion	Eagle Creek Park, Indianapolis	\$240

Indy library branches to offer native seeds

If you've ever wished you could check something out at the library and not worry about when to return it, you'll be happy to know some branches of Indianapolis Public Library will let you check out up to 15 packets of seeds per year – for keeps.

At present only Glendale and Spades Park branches have seed libraries, but next year several more branches are expected to begin offering seeds. The IndyPL Seed Library program is available from late March to October.

In addition to vegetables, herbs and annual flowers, Glendale and Spades Park branches currently have seeds of two natives, common milkweed (*Asclepias syriaca*) and butterfly weed (*A. tuberosa*).

In 2020 the Pike Branch will offer a larger assortment of native seeds. These include: wild columbine (Aquilegia canadensis), swamp milkweed (A. incarnata), common milkweed, butterfly weed, false blue indigo (Baptisia australis), purple coneflower (Echinacea purpurea), wild bergamot (Monarda fistulosa), gray-headed coneflower (Ratibida pinnata), black-eyed Susan (Rudbeckia hirta or R. serotina), New England aster (Symphyotrichum novae-angliae) and two grasses, little bluestem (Schizachyrium scoparium) and prairie dropseed (Sporobolus heterolepis).

Those wishing to donate clean, viable seeds can contact Pike Branch librarian (and INPS member) Anika Williams at awilliams@indypl.org. Also visit www.indypl.org/services/seed-library.



Ideas for winter reading

Planting Native to Attract Birds to Your Yard, by Sharon Sorenson, Stackpole Books, Guilford, CT, 2018

Reviewed by Patricia Happel Cornwell

Sharon Sorenson will be one of the speakers at the Nov. 9 INPS annual conference, and those who are equally passionate about native plants and birds will want their own copy of her book, *Planting Native to Attract Birds to Your Yard.*

The book is both attractive and practical, interweaving planting charts and text about birds' diet and nesting requirements with hundreds of excellent photos of both plants and birds, all taken by Sorenson and her husband Charles.

Sorenson begins with the basics of landscaping for birds, which means landscaping for insects, frogs and other small creatures as well. She dispenses facts in an easy-to-digest format. For her, it boils down to: "Change the habitat and you'll change which birds live there." To this end, she explains birds' reliance on native plants for shelter and food and which birds eat what. She addresses the why and how of replacing invasive plant species with native alternatives that support more kinds of life.

The author discusses eradicating invasives, finding sources for natives, reading plant labels carefully, using appropriate mulching materials, reducing "useless lawn," and letting seed-bearing plants stand over the winter to provide food for birds. She provides common and Latin names for both birds and plants. Her work is well-researched yet guite accessible to the lay reader.

Recognizing the intimidating challenge of revamping one's landscape, Sorenson encourages creating a yard map on graph paper, then lays out a five-step plan for choosing the right proportions of native trees, shrubs, vines and perennials. Sorenson suggests doing "before and after" bird counts to measure the increase in birds and bird species as a result of converting one's yard to natives.

An index makes the book useful as a reference tool. Or you can just enjoy this one as a good read that happens to be stuffed with useful facts.

Patricia Happel Cornwell is co-editor of INPS

Journal and a member of South Central Chapter.

Wake Up, Woods, Illustrations by Gillian Harris, text by Michael Homoya, verses by Shane Gibson, Rubber Ducky Press, Indianapolis, 2019

Reviewed by Katherine Newkirk

Like the forest understory this book explores, Wake Up, Woods is richly layered. Though loosely aimed at early elementary kids, the book will entice all ages along its several paths. Each stunningly illustrated two-page spread features understory bloomers along with associated visitors, a four-line verse and a paragraph of botanical information.

Many a preschooler will keep turning pages in search of critters such as the field mouse, six-spotted tiger beetle and marbled orbweaver. Illustrator Gillian Harris brings out the energy and "personalities" of both flora and fauna in exquisite biological detail. More than 50 illustrated species are listed with their common names and Latin binomials in an appendix.

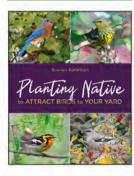
Young readers will enjoy sounding out the rhymes by poet Shane Gibson, while their adults may smile at his humor. Christmas fern, for example: "A fiddlehead / No strings attached / Unfurled beauty / Spring's here at last." I found an occasional rhythm or rhyme challenging and also wondered what will happen when young readers bump into words like sepal, whorl and proboscis. Luckily, a glossary explains 26 specialized terms.

Nature lovers of all ages will enjoy the illustrations, and I predict many will learn new things about relationships among understory species, thanks to botanical text by Mike Homoya. For example, "After bloodroot goes to seed, elaiosomes (food bodies) that are attached to the seeds attract ants, which carry the seeds to their nests underground. Some ants carry them as far as forty feet away from the plant!"

Wake Up, Woods is dedicated to "all children who find delight in the awakening woods," but I suggest that Wake Up, Woods will delight and inspire nature lovers of all ages. I hope it finds its way into laps and libraries everywhere.

Katherine Newkirk is co-editor of the INPS Journal and a member of Central Chapter.





Dune Boy: The Early Years of a Naturalist, by Edwin Way Teale, Dodd, Mead & Company, 1944

Reviewed by Terri Gorney

May I make a suggestion for your winter reading? *Dune Boy* by Edwin Way Teale is the perfect book for the Hoosier nature lover. Its story takes place in northwestern Indiana. My father grew up in Lake County close to where our ancestor, John Bothwell, settled in the dune region in 1836, so this family connection to the area piqued my interest.

The dune region stimulated Teale's lifelong interest in nature. It is where he spent time with his "Gram and Gramps" in Porter County on their Lone Oak farm. He dedicated *Dune Boy* to "my grandparents, Edwin and Jemima Way, with gratitude which has grown with the years."

During the school year he lived in Joliet, IL. During his first 15 years he spent summers, Christmas, Thanksgiving and Easter breaks on his grandparents' "dune-country farm." That 70 miles between Joliet and their farm "seemed to carry me to the other side of the world."

Teale described his perch on the roof of the farmhouse, from where he could see the "hills of gold" (dunes) a mile and a half away. The dunes "stirred his imagination" and his grandparents gave him the freedom to explore. He was in awe of sandhill cranes flying over and bald eagles soaring. The farm spread around him, with its woods, swamp of tangled vegetation, apple orchards, asparagus patch and spearmint growing along ditches.

In the summers, he helped his grandparents with the crops. He wrote, "The clean, sweet smell of the morning fields filled the air." Strawberries, along with asparagus, "brought in the earliest revenue of the season." His grandfather shipped hundreds of crates of strawberries to the Chicago market. Around the fourth of July came early potatoes, followed by red Astrakhan apples and grain. The fall crops were pumpkins, corn, turnips, squash, late potatoes and autumn apples. There were also the simple pleasures

of his grandmother's home-made ginger ale or sassafras tea.

At the age of nine, Teale started writing a book called *Tales of Lone Oak*. He gave a sample of his earliest writings in one of the chapters of *Dune Boy*.

Teale studied literature at Earlham College. It was his love of both literature and nature that made him a great nature writer. He was a keen observer of the natural world and shared that passion in the 36 books he penned.

He became a well-known naturalist, author and photographer. In the 1940s, he wrote about his "Dune Boy" childhood in the early 20th century where a world of birds, animals, and insects "offered boundless returns."

Teale wrote about his travels through Indiana with his wife Nellie in his book Wandering Through Winter, which earned him a Pulitzer Prize.

By chance, if you are driving along Highway 20 in Chesterton, you may pass a historical marker which marks the spot where Lone Oak Farm once existed and where a young Edwin Teale learned of the wonder and awe of nature.

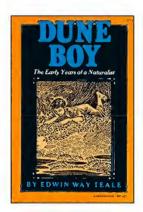
Dune Boy is out of print, but old and new copies can be found on Amazon or Alibris.

Terri Gorney is a member of INPS Northeast Chapter and vice-president of Friends of the Limberlost.

Dunes group plans planting guide

An article on the website *savedunes.org* touts the impressive array of life forms in the Indiana Dunes National Park and encourages Hoosiers in adjacent properties or nearby communities to plant native plants to extend the habitat for pollinators and other life forms ("Biodiversity thrives in the Indiana Dunes," Aug. 5, 2019).

The group Save the Dunes plans a second installment of its "Living in the Dunes" guide, this one to explain what neighboring homeowners can do with native landscaping to attract "a treasure-trove of pollinators." No publication date has been set, but they advise citizens to "stay tuned."



Grow Natives nursery profile

Restoration is nursery's focus

By Ellen Jacquart

Grow Indiana Natives is an INPS program to connect customers with native plant sellers. For information on where to buy natives and how to certify your own garden, visit GrowIndianaNatives.org. In this issue, we feature one of our earliest Invasive-Free Grow Indiana Natives members.

Everyone has a favorite native plant. Amy Rhodes, restoration ecologist and sales manager for Spence Restoration Nursery, says hers is cup plant (*Silphium perfoliatum*) because it embodies the human-plant-wildlife connection. She notes that the cup where the leaves join collects water for pollinators and wildlife; the flowers are a great source of pollen and nectar; the plant has high protein value for cattle; it's easy to grow and long-lived (up to 50 years); and its stems and leaves can be cut to serve as mulch to keep weeds down. It is one of hundreds of native species sold by Spence.

Amy came to Spence two years ago, after spending eight years in her own business. Started in Muncie in 1977 by Doug Spence, the nursery began specializing in native plants and seed in 1995 with Kevin Tungesvick, their former restoration ecologist, greatly expanding their propagation and sale of native plants.

The current focus at Spence is to provide high quality, nursery-propagated native plants for the restoration of native plant communities. They also provide plants for environmentally sound landscapes. They are a wholesale business, selling to commercial and residential landscapers and installers of wetland and prairie restorations, lake edge enhancement systems and rain gardens. Spence also sells to non-profits and government entities that do native plant community restorations, to local businesses like Native Plants Unlimited and Indy Urban Acres, and to several Indiana Soil and Water Conservation Districts, which then sell them to retail customers around the state.

Rhodes estimates the nursery sells 800,000 to 1,000,000 plants a year, in addition to selling native seed produced on 260 acres. More about Spence Restoration Nursery is at www. spencenursery.com.

Ellen Jacquart is president of INPS.

Koontz – from page 16

this when he ventured into the wetland with me. That being said, staying along the wetland's edge is not a disappointing experience. One can tread lightly, heading east along a dry, well-used game trail that meanders within a few feet of the water.

Along this path, the odd-looking spathes of skunk cabbage (*Symplocarpus foetidus*) are abundant above the water's surface early in spring, soon followed by their large leaves that add to the beauty and primitive feel of this portion of the preserve. For those "sedgeheads" out there, there are numerous species of interest as well. The blooms of blue flag iris (*Iris virginica* var. *shrevei*) add color in late spring.

I mention treading lightly in this area due to pockets of wintergreen (*Gaultheria procumbens*) that grow alongside the game trail. Also numerous amphibians migrate through this area to the wetland for breeding each spring. Frog breeding activities at that season break the silence in the wetland, while birds break the silence throughout the entire area.

With many of the senses being engaged by the surroundings of the preserve, one's sense of wonder is evoked. After hiking from one side of the preserve to the other, one finds that the game trail ascends north from the wetland into the sand prairie, where the path can be taken west back to the parking area.

It is also good to contemplate the history of the area while hiking it. Koontz Lake did not always exist as it is known today, but consisted of two separate kettle lakes until the construction of an earthen dam in the mid-1800s (Allen). The higher water levels created the change seen today. After observing the diversity of species throughout the wetland, it is hard to hike around and not speculate what it may have been like before the dam was built.

For more about Koontz Lake Nature Preserve, see www.in.gov/dnr/naturepreserve/files/np-Koontz Lake.pdf.

Reference

Allen, Marvin. "A History of Koontz Lake." Starke County Public Library, www.scpl.lib.in.us/historical/scpl_files/ pdf_documents/ahistoryofkoontzlake.pdf, accessed July 2019

Adam Balzer is a botanist at Cardno and secretary of INPS North Chapter.



INPS on the road

By Ruth Ann Ingraham

After a nine-year hiatus, INPS sponsored a three-day coach tour this June to sites in eastern Indiana and west central Ohio for members and friends. INPS member Mark Zelonis, through his company Cultural Excursions, researched, planned and led the tour. Twenty-five travelers discovered new places, both natural and created, and identified many native plants. Luckily, even the predicted storms, heat and humidity dissipated.

Here's what the group enjoyed:

- guided tours of wetlands, fens, forest and prairies
- Indiana's Cope Environmental Center (Richmond, IN)
- Cedar Bog Nature Preserve's rare remnant cedar forest in the midst of a calcareous fen (Urbana, OH)
- Clifton Gorge State Nature Preserve (Yellow Springs, OH), with a hike along a spectacular dolomite and limestone gorge that provides a cool, moist environment for hemlock, red baneberry and mountain maple
- Dayton, Ohio's Five River MetroParks, including Aullwood Garden; Sugarcreek with ancient
 - oaks and an unusual osage orange tunnel; Cox Arboretum with trails through woods, prairie and conifers; and Wegerzyn Gardens, most of which survived late spring tornados
- Mount Saint John and the Marianist Environmental Education Center (Green County, OH), featuring an oak-hickory woodland, fen and prairie

Zelonis has organized over three dozen tours, domestic and international, many through (then) Indianapolis Museum of Art's Horticultural Society. He has agreed to organize a 2020 INPS trip and welcomes your ideas for destinations.

Ruth Ann Ingraham is a founding member of INPS and a member of Central Chapter.









Counterclockwise from top: group photo at Clifton Gorge State Nature Preserve with guide Michelle Corner on far left, 600-year-old white oak at Sugarcreek Metropark, Indian pink at Aullwood Garden, Osage orange tunnel at Sugarcreek Metropark



Non-Profit Organization U.S. Postage PAID Indianapolis, IN Permit No. 229

Natural area profile

Koontz Lake Nature Preserve

By Adam Balzer

Koontz Lake Nature Preserve, hidden away in Starke County, boasts multiple plant communities throughout its 148 acres. It is owned and managed by the Department of Natural Resources (DNR). The entrance is a sandy two-track path straight south off a dead-end road, but this preserve is certainly not a dead-end. Stopping in the small parking area, one can already observe two of the plant communities, a sand prairie and an oak savanna.

From that point, there are no marked trails, although there are paths that should be followed. In summer, the sand prairie dominated by little bluestem (*Schizachyrium scoparium*) has an interesting, easy loop around it that can be used to observe plant species such as flax-leaved aster (*Ionactis linariifolia*), round-headed bush clover (*Lespedeza capitata*) and rough blazing star (*Liatris aspera*).

After this relatively short loop, the more adventurous can head west through the oak savanna. The access trail through this area is

dominated by common oak sedge (*Carex pensylvanica*) with sunny pockets of woodland sunflower (*Helianthus divaricatus*) later in the summer, as well as many other interesting species hidden throughout the understory. This is also the path that descends into the wetland that borders the northern side of Koontz Lake.

Tom Post, DNR northwest regional ecologist, once told me that this wetland was the reason this area was preserved. It does not take long to see why. Just as the trail descends to the wetland's edge, a snapshot of the natural history of the area can be observed. Before even setting one foot in the water, large tamarack (*Larix laricina*) can be seen with hummocks covered by sphagnum (*Sphagnum* spp.) and other mosses at their base. These hummocks serve as a habitat for northern plant species that likely were more dominant in the past. Highbush blueberry (*Vaccinium corymbosum*) is conspicuously abundant on these mossy hummocks along with shorter species such as smooth mayflower (*Maianthemum canadense*), sedges (*Carex* spp.) and a few different ferns.



Wetland edge at the Koontz Lake preserve

I could easily get lost at this point of the path for hours, venturing into the water to look at the hummocks and the botanical treasures they hold, but this is not advisable. There are deep holes, possibly formed by uprooted trees, hidden beneath the surface of the water. Also, in certain areas the water contains urushiol oil from gorgeous, yet hazardous poison sumac (*Toxicodendron vemix*). One of my friends learned